

November 2005 - Review of Weather Including Temperatures and Precipitation for the Quad State Region.

Weather Summary for November 2005

Precipitation

November was a very active month across the region. Three separate severe weather events produced a total of 17 tornadoes that included 1 F-4 and 3 F-3s. A stalled warm front that preceded one of these events produced massive amounts of rainfall and flash flooding across a narrow strip of the region. For the month, temperatures were 1.5 to 3.5 degrees above normal (47 to 50 degrees). Rainfall varied greatly due to the stalled front mid-month. Paducah ended the month with 2.06 inches, 2.47 inches below normal. Evansville had 5.93 inches, 1.75 inches above normal.

On the first, a surface cold front sat to the east of the area and continued to move east. Very light precipitation fell as the upper level low passed to the east as well. Most locations received around one-tenth of an inch of rain or less. Most days during the first half of the month were very warm with daytime highs mostly in the 70s. An area of low pressure developed in the Southern Plains on the 4th and moved northeast. As it did so, it strengthened dramatically with large pressure falls. Severe weather broke out during the evening of the 5th and continued during the overnight hours. Two F-3 tornadoes struck communities from Crittenden County, Kentucky northeast through the cities of Henderson, Kentucky and Evansville, Indiana and finally into Spencer County, Indiana. Rainfall amounts were generally around one-quarter inch or less but there were isolated amounts around one inch in stronger storms.

High pressure took control for a few days and daytime highs once again rose some 10 to 20 degrees above normal. Another area of low pressure developed in the Southern Plains but this time slowly approached the region on the 14th. A warm front stalled across the central part of the county warning area during the overnight hours with lots of warm, moist air feeding in from the Gulf of Mexico. Regenerating thunderstorms trained over many communities from Piedmont, Missouri northeast to Marion, Illinois and then east to Henderson, Kentucky. Rainfall in this swath totaled from 6 to 10+ inches. Communities were swamped. Numerous roads were closed and several evacuations occurred, the largest in Henderson, Kentucky. Most locations during this 3-day event received between one and four inches of rain. As the warm front eventually moved north, a cold front approached from the west. Several lines of storms developed including several supercells. One F-4 tornado struck the Earlington and Madisonville, Kentucky areas and one F-3 devastated parts of Marshall County, Kentucky. Cold air swept into the region behind the front reminding everyone that it was indeed November.

A quick cold front on the 20th brought trace amounts of precipitation to the northern half of the area. Another storm system in the Plains approached late in the month. Warm, moist air fed into the region on the 27th and 28th and once again severe weather broke out. This event was not widespread and was generally confined to southeast Missouri. One F-

2 tornado touched down in southern Ripley County. Total rainfall amounts between the 26th and 28th ranged from one to two inches.

Figure 1. November 2005 Average Daily Temperature Summaries (Degrees F) for Several Quad State Region Locations.

<u>LOCATION</u>	<u>TEMPERATURES</u>	<u>HIGH</u>	<u>LOW</u>	<u>AVERAGE</u>
<i>Carbondale Illinois</i>	Normal (94 years)	55.9	34.7	45.5
	2005	61.2	37.3	49.3
<i>Cape Girardeau Missouri</i>	Normal (30 years)	56..5	37.6	47.3
	2005	61.0	36.5	48.8
<i>Evansville Indiana</i>	Normal (30 years)	55.5	36.8	46.4
	2005	59.2	36.4	47.8
<i>Paducah Kentucky</i>	Normal (30 years)	57.5	38.1	48.0
	2005	62.5	37.9	50.2
<i>Poplar Bluff Missouri</i>	Normal (30 years)	57.8	37.1	47.8
	2005	63.8	37.3	50.6

Figure 2. November Average Monthly Precipitation (inches) and 2005 Observed Precipitation for Several Quad State Region Locations.

<u>LOCATION</u>		<u>TOTAL PRECIPITATION</u> (includes melted snow)	<u>2005 DEPARTURE</u> <u>FROM NORMAL</u>
<i>Carbondale Illinois</i>	Normal:	4.57	4.59
	2005:	9.16	
<i>Cape Girardeau Missouri</i>	Normal:	4.64	1.04
	2005:	3.60	
<i>Evansville Indiana</i>	Normal:	4.19	1.75
	2005:	5.94	
<i>Paducah Kentucky</i>	Normal:	4.53	-2.47
	2005:	2.06	
<i>Poplar Bluff Missouri</i>	Normal:	4.88	-1.10
	2005:	3.78	

